REMARKS

This Amendment is in response to the Office Action mailed 04/06/2005. In the Office Action, the Examiner rejected claims 1-10 under 35 U.S.C. § 112, and rejected claims 1-30 under 35 U.S.C. § 103. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Detailed Action

2. The examiner notes that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. Applicant has provided the requested line numbers in the Listing of Claims included with this Response for ease of reference by the examiner. For the edification of the examiner applicant respectfully notes that the present application was filed using the Electronic Filing System (EFS). The format of applications filed with EFS is controlled by the USPTO and not by the applicant. Further, applicant understands the use of line numbers in both the specification and the claims to be an archaic practice that is no longer recommended by the USPTO.

Rejection Under 35 U.S.C. § 112

4. The Examiner rejects claims 1-10 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The examiner remarks that claim language in the following claims is not clearly understood:

i. As to claim 1, the examiner does not clearly understand what happen after the third queue have the task identifier and what is the third queue doing with the task identifier (i.e. the task identifier will be executed?).

Applicant has amended claim 1 to provide that the third queue is to hold task identifiers placed in the third queue by the switch and provide the task identifiers to a processing unit in the order task identifiers were placed in the third queue by the switch as disclosed in paragraphs [0026]-[0027] of the specification as filed. No new matter is added.

ii. As to claims 3-4, line 2, the examiner does not find it clearly indicated whether "priority types" refers to "the priority type first and second priority type " in claim 1; it is not clearly understood what is meant by "data frame types" and how it relates with "priority types".

Applicant has amended claims 3 to provide that the look-up table provides one of the first priority type and the second priority type to the task scheduler for every data frame received according to the data stream in which the data frame was included as disclosed in paragraph [0023] of the specification as filed. No new matter is added.

Applicant has amended claims 4 to provide that one of the first priority type and the second priority type is pre-assigned to the data stream as disclosed in paragraph [0024] of the specification as filed. No new matter is added.

Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-10 under 35 U.S.C. § 112, second paragraph.

Rejection Under 35 U.S.C. § 103

6. The Examiner rejects claims 1-2, 6-12, 14, 17-20, 23-26, and 29-30 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA).

7. As to claims 1, 11, 19 and 24, the examiner asserts that Miro teaches the invention substantially as claimed including a device comprising:

a third queue (service queue, col. 3, line 50) coupled to the switch, the third queue to hold task identifiers retrieved by the switch (col. 3, lines 50-53; col. 14, lines 10-12).

Applicant has amended claim 1 to provide that the third queue is to hold a plurality of task identifiers placed in the third queue by the switch. The service queue disclosed by Miro holds only a single request. Miro discloses that a single request is transferred to the service queue when a last request on the service queue is dispatched (col. 3, lines 50-57). Thus there is at most one request in the service queue disclosed by Miro. The claimed third queue is clearly distinguished from the service queue of Miro because it is now claimed as holding a plurality of task identifiers as disclosed in paragraphs [0026] *et seq.* and Figures 4-9 of the specification as filed. No new matter is added.

10. As to claim 2, applicant relies on the patentability of the claims from which this claim depends to traverse the rejection without prejudice to any further basis for patentability of this claim based on the additional elements recited.

11. As to claim 6, applicant relies on the patentability of the claims from which this claim depends to traverse the rejection without prejudice to any further basis for patentability of this claim based on the additional elements recited.

12. As to claims 7, 17 and 29, the examiner asserts that Miro teaches the task router is configured to monitor the first queue for an overflow condition and, if an overflow condition is detected, reassign data frame priority types to prevent overflow of the first queue (col. 3, line 63 - col. 4, line 4). Applicant respectfully disagrees. Applicant understands the cited portion of Miro to disclose that the task router is configured to monitor the first queue (one of the holding queues) for an "oldest" request that has been enqueued for longer than a predetermined "starvation time" and to transfer that request to a higher priority queue. Nothing in the cited disclosure discloses monitoring the first queue for an overflow condition because the request is already in the first queue (and has been for a long time) and the request is not transferred to prevent overflow of the first queue but rather to avoid having low priority requests languish in the low priority queues.

13. As to claims 8-9, applicant relies on the patentability of the claims from which these claims depend to traverse the rejection without prejudice to any further basis for patentability of these claims based on the additional elements recited.

14. As to claim 10, the examiner asserts that Miro teaches the third queue is a shared execution queue from which one or more processing units retrieve task identifiers to process (col. 1, lines 42-45). Applicant respectfully disagrees. Applicant understands the cited portion of Miro to disclose a set of priority ordered request holding queues for each physical disk drive in a processing system. Thus only one processing unit retrieves task identifiers to process from the service queue. One of ordinary skill in the art would understand that requests for a disk drive must be associated with only that disk drive as it is not possible to service requests directed to a disk drive by any other disk drive.

15. As to claims 12, 14, 20, and 25, applicant relies on the patentability of the claims from which these claims depend to traverse the rejection without prejudice to any further basis for patentability of these claims based on the additional elements recited.

16. As to claims 18, 23 and 30, the examiner asserts that Miro teaches placing the retrieved data frames into an execution queue to be processed (col. 1, lines 42-45; col. 3, lines 50-53; col. 14, lines 10-1 2). Applicant has amended these claims to provide that the execution queue is to hold a plurality of the retrieved data frames. The service queue disclosed by Miro holds only a single request. Miro discloses that a single request is transferred to the service queue when a last request on the service queue is dispatched (col. 3, lines 50-57). Thus there is at most one request in the service queue disclosed by Miro. The claimed execution queue is clearly distinguished from the service queue of Miro because it is now claimed as holding a plurality of the retrieved data frames as disclosed in paragraphs [0026] *et seq.* and Figures 4-9 of the specification as filed. No new matter is added.

17. As to claim 26, applicant relies on the patentability of the claims from which this claim depends to traverse the rejection without prejudice to any further basis for patentability of this claim based on the additional elements recited.

Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-2, 6-1 2, 14, I7-20, 23-26, and 29-30 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA).

18. The Examiner rejects claims 3-5 and 13 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA), as applied to claims 1, 11, 19 and 24 above, and further in view of Sherrod (U.S. Patent 4,642,756).

19. As to claim 3, the examiner admits that Miro does not explicitly teach a look-up table store communicatively coupled to the port, the look-up table store to store conversions between priority types and data frame types. However, the examiner asserts that Sherrod teaches look-up table store communicatively coupled to the port, the look-up table store to store conversions between priority types and data frame types (col. 3, lines 7-1 2 and lines 23-28). Applicant has amended the claim to provide that the look-up table provides a priority type according to the data

stream in which the data frame was included. Applicant respectfully submits that nothing in Sherrod teaches or suggests providing a priority type according to a data stream in which a data frame was included. Applicant is unable to find any part of Sherrod that discusses data streams or data frames for any purpose.

21. As to claims 4 and 13, applicant relies on the patentability of the claims from which these claims depend to traverse the rejection without prejudice to any further basis for patentability of these claims based on the additional elements recited.

22. As to claim 5, applicant relies on the patentability of the claims from which this claim depends to traverse the rejection without prejudice to any further basis for patentability of this claim based on the additional elements recited.

Applicant respectfully requests that the Examiner withdraw the rejection of claims 3-5 and 13 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA), as applied to claims 1, 11, 19 and 24 above, and further in view of Sherrod (U.S. Patent 4,642,756).

23. The Examiner rejects claims 15-16, 21-22, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA), as applied to claims 1, 11, 19 and 24 above, and further in view of Beaulieu et al. (U.S. Patent 6,182,120).

24. As to claims 15, 21 and 27, applicant relies on the patentability of the claims from which these claims depend to traverse the rejection without prejudice to any further basis for patentability of these claims based on the additional elements recited.

26. As to claims 16, 22 and 28, applicant relies on the patentability of the claims from which these claims depend to traverse the rejection without prejudice to any further basis for patentability of these claims based on the additional elements recited.

Applicant respectfully requests that the Examiner withdraw the rejection of claims 15-16, 21-22, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Miro (U.S. Patent 5,220,653) in view of Applicant Admitted Prior Art (AAPA), as applied to claims 1, 11, 19 and 24 above, and further in view of Beaulieu et al. (U.S. Patent 6,182,120).

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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By _____

James Henry
Reg. No. 41,064
Tel.: (714) 557-3800 (Pacific Coast)